James Acker:
I see that we currently have several participants who worked with Greg

OK - it's 9:20 now, and our next presentation will be at 9:30. I have a couple of email messages to answer from people who want to get the information on joining the meeting.

James Acker:
Just uploading my next presentation.

Everyone ready? - sorry, I forgot what I named the file.

Most of you are familiar with Giovanni, but since it began, it has had these primary components.

I won't try to spell out the names of all these missions! NASA Earth observational data is well represented in Giovanni.

In addition to data from the satellite instruments, we have data from several different models that NASA employs to calibrate, validate, and assimilate remote sensing data with.

We have also built some data portals for specific applications. Greg Leptoukh led the efforts for NEESPI and MAIRS.

Just a review of what our current Giovanni-3 interface looks like. (Thanks to Hualan Rui for this slide.)

Now I'm going to briefly describe DICCE. PI Daniel Zalles will talk more about it this evening at 7 PM EDT.

DICCE was our first chance to construct Giovanni directly for an educational purpose.

This is what the Basic data portal looks like. The Intermediate and Full portals, to be added this year, will have more parameters.

One nice thing about DICCE is that it puts different data products together, allowing rapid generation of plots by students and teachers.

DICCE also led to the beginning of our YouTube videos, which will expand for both Giovanni and other GES DISC tools and activities.

When teaching climate change, we realized that we had to explain how to examine and interpret trends in the data. Not all trends make "sense" at first glance.

We are working on pages that explain how to choose palettes, how to work with the dynamic and custom choices in palette value ranges, and other things that experienced users have learned.

There are some other really exciting things in Giovanni right now - some so new that I haven't had a chance to write the news articles about them yet! The NLDAS hourly is amazing to look at weather events.

Suhung Shen will talk about high resolution data this evening.

SeaWiFS Deep Blue shows where the dust in dust storms COMES from.

That's all for this intro -- any questions?

David Mocko:
Perhaps I missed it - but will there be improvements to processing speeds with the new version?

James Acker:
Chris can comment on that. I know its a goal.

Christopher Lynnes:
Yes, I will talk to that in the G4 talk.

David Mocko:
great! (not that I'm unhappy with the current speeds)

Tracy Van Holt:
Would DICCE be useful for mappiing drought in space. I am working on a project
where we map out newspaper content across space (ie. drought and non drought areas. (across space, not in space)

Pavel Kischcha:
Will there be an opportunity to select data for non-consecutive months/days?

James Acker:
DICCE only has one precipitation project. The NLDAS and GLDAS data sets have many hydrological parameters, like soil moisture.

Tracy Van Holt:
cool

James Acker:
Pavel, I'm not sure. I think you should send us a message with details and explaining how you would use that capability. Our programmers are pretty clever ;-)

Dimitris Kaskaoutis:
Hello from me.

James Acker:
Tracy, I meant precipitation product. The TOVAS/TRMM data is also useful.

James Acker:
Hello Dimitris

Dimitris Kaskaoutis:
concerning the question of DR Pavel, I did not find the way to do that at the same time

i.e. to select data from different months, days

Natalia Chubarova:
I support Pavel. We need the averaging for a particular period to obtain more precise monthly climatology, for example.

James Acker:
You can get data for individual days/months and average it in another application, like Excel
I know that getting data for "all Januarys", for example, has been requested.

Dimitris Kaskaoutis: the latter is impossible! as far as I know, you have to analyze them in excel

Natalia Chubarova:
OK

James Acker:
Yes. Actually, I had to do that for one of the first papers I wrote using Giovanni.
We do know that is a desirable feature.

James Acker:
Anyone else?

James Acker:
We will take a five minute break for coffee and a stretch and then start on research highlights.

Maksym Petrenko:
We experimented with 'annual repeating month' in Giovanni 4 - AeroStat and MAPSS, where you can request data from, say, all Januaries, or all March-Junes. I think at some point this feature might be ported to other portals as well.

Pavel Kishcha:
would be great

James Acker:

OK, I'm back.

James Acker:
One of the fun things about my work with Giovanni here at the GES DISC is seeing the research that is being done with it. That is how I first learned about many of the presenters at this workshop.

If you go to the Giovanni home page, you can click on Publications and see the papers published each year.

We should go over 600 this year.

The next slides are a preview of our next Giovanni News 'research' issue, which will come out after the workshop, and also discuss the workshop.

This shows how to subscribe. You can just email me and I'll put you on the subscription list.

By the way, our customer satisfaction survey is underway. If you haven't responded to the invitation to take the survey, it would be very useful to us.

The customer satisfaction survey is an annual survey for all of the NASA earth science data centers

The first paper was about leatherback turtle populations and their behavior in the Atlantic and Pacific Oceans.

Back in 2003, a paper was published about loggerhead turtles that showed they stayed near a defined chlorophyll concentration.

They weren't measuring the chlorophyll, that's just where the jellyfish were.

This paper showed a distinct difference in the movement and diving behavior of the turtles, probably dependent on prey concentration.

Here's what a radio-tagged leatherback turtle looks like. I think they can weigh up to 1000 pounds. Don't know what that is in kg. (500 or so?)

The next paper was interesting to me because the East Coast of the U.S. is also subject to pollution aerosols transported from a distance.

Tracy Van Holt:
I just love, love, when explanations of movements are tied to reproductive success or some biological measure of success. re; turtles

James Acker:
Thanks Tracy. One thing about this paper was talking about how to distinguish local from regional air masses.

In this case, black carbon (soot) was an indicator of the source.
It had a strong effect on the radiative forcing.

Dimitris Kaskaoutis:
Very nice to see that paper to be highlighted, since I had reviewed it in Atmos. Research

I had discussed with the first author extensively about the main findings.

James Acker:
The MODIS image is a good indicator of what the pollution looks like and where it comes from.

James Acker:
Thanks, Dimitris! By the way, Tamil Nadu province is south of the image - it is the 'end' of the Indian subcontinent, pointing toward Sri Lanka.

Dimitris Kaskaoutis:
That's right!!

James Acker:
Our next highlighted paper is by Dr. Mark Jury. (Roy Armstrong may know him).

Dr. Jury has used Giovanni for a variety of research topics. In this case, he looked at influences on the Benguela upwelling zone.

Dr. Jury was able to examine the factors that influenced fishery success.

I've always liked the Benguela upwelling zone because of the remarkable images that come from it.

Also, this is a good place to educate students about upwelling, because the sea surface temperature pattern is clear.

The last paper that I will highlight has a climate change aspect.

The problem of black soot affecting the albedo, reflectivity, and melting of ice has recently become better known.

This paper was a good combination of observational data in Giovanni combined with model-derived data.

And to finish up, this paper shows the region under study, which has been called Earth's "third pole".

The status and future of Himalayan glaciers has been in the science news for the past years.

That's all I have for this - any comments?

Let's enjoy a few minutes of free time before we learn about Giovanni-4 at 10:30 AM EDT.